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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,019	09/12/2003	Feng Chen	TI-35765 (032350.B523)	6817
23494	7590	07/08/2005	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			JEAN PIERRE, PEGUY	
			ART UNIT	PAPER NUMBER

2819

DATE MAILED: 07/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/661,019

**Applicant(s)**

CHEN, FENG

**Examiner**

Peguy JeanPierre

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 5/24/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 13-18 and 20 is/are allowed.
- 6) ☐ Claim(s) 1,2,7,8 and 19 is/are rejected.
- 7) ☐ Claim(s) 3-6 and 9-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 7-8, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Khoury et al. (USP 6,121,910).

Khoury et al. disclose in Figure 1, a sigma delta modulator to digitize an analog input signal having an intermediate frequency signal ( $f_{in}$ ). The converter comprises a filter (104) that can be implemented as a bandpass filter (col. 4, lines 48-53) that inherently yields a bandpass response; claim 9 also recites that the filter comprises a bandpass filter. The filter can also be a passive filter (see col. 8, lines 19-21), a quantizer (108) that can be implemented as a comparator or ADC converter (see col. 4, lines 65-67).

#### ***Allowable Subject Matter***

4. Claims 3-6 and 9-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. Claims 13-18 and 20 allowed.

#### ***Response to Arguments***

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6. Applicant's arguments, see Appeal Brief, filed on 5/24/2005, with respect to the rejection(s) of claim(s) 1-2, 7-8 and 19 under Connell have been fully considered and are persuasive. Therefore, the rejection based on Connell reference has been withdrawn. The rejection has been rewritten and further clarified to clearly identify all the elements that applicant allegedly do not list all the limitations

However, upon further consideration, the rejection under Khoury is maintained. Khoury discloses every feature of the claimed invention as set forth above. Applicant main argument is that the claimed call for a passive filter. This limitation can be found in col. 8, line 19; applicant argues that the filter of Khoury cannot be a bandpass filter; this limitation can be found in claim 9.

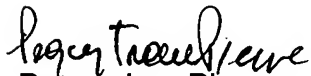
Since the Connel reference is now removed from the rejection, the final rejection has been withdrawn to allow Applicant to reply to the sole reference used to reject the claims. In addition, the rejection of the claims based on Khoury reference has been rewritten.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Leung (USP 6,064,871), Lipka (USP 6,459,743).

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peguy JeanPierre whose telephone number is (571) 272-1803. The examiner fax phone number is (571) 273-1803.

  
Peguy JeanPierre  
Primary Examiner